# **Toys that Fly Hotlist**

### **Introduction**

A collection of Websites that offer flying toys that range in cost from free to some expensive.

**Aviation Toys for All Ages -** commercial site: FlyingToys.com <a href="http://www.flyingtoys.com/Store">http://www.flyingtoys.com/Store</a>

Pioneer Models - Wright airplane model kits

http://www.first-to-fly.com/Adventure/workshop/modelkits.htm

All kinds of flying toys - commercial site: Explore! <a href="http://explore4fun.com/explorestore/flying.html">http://explore4fun.com/explorestore/flying.html</a>

**Flying Toys -** all kinds of flying toys, including some NASA spinoffs (commercial site) <a href="http://www.iqkids.net/flyingtoys.html">http://www.iqkids.net/flyingtoys.html</a>

**Kids Invent Flying Toys -** one-week summer "inventor's" camp for kids <a href="http://www.kidsinvent.org/">http://www.kidsinvent.org/</a>

Paper Airplane Books - a comprehensive list (commercial site) <a href="http://www.spacestation42.com/Shops/paperairplane.html">http://www.spacestation42.com/Shops/paperairplane.html</a>

"Ultimate Flying Object" web site - a unique flying toy http://www.ultimateflyingobject.com/

Toy Airplane Collectibles - commercial site <a href="http://toyscollectibles.allinfo-about.com/subjects/airplanes.html">http://toyscollectibles.allinfo-about.com/subjects/airplanes.html</a>

Expensive Flying Toys - including "flying saucers" and blimps http://www.e-sci.com/genSci/9/1042/1094/W1094.html

**Paper Airplanes -** a comprehensive site with lessons and resources from the University of Newfoundland <a href="http://www.stemnet.nf.ca/CITE/paper.htm">http://www.stemnet.nf.ca/CITE/paper.htm</a>

Flying ring web site - includes scientific information <a href="http://www.aerobie.com/">http://www.aerobie.com/</a>

Unusual (and some ancient) aerodynamic toys - (commercial site) <a href="http://www.flight-toys.com/">http://www.flight-toys.com/</a>

**Forces on a Glider -** general description of the aerodynamic forces on unpowered aircraft (with grade-level activities)

http://www.grc.nasa.gov/WWW/K-12/airplane/glider.html

### **Notes to Educators and Students**

Designing, creating and flying the models students create will help students to learn and to reinforce the basic concepts of flight and mathematics. Some of the sites listed here have instructions for building very inexpensive flight vehicles. Other sites are commercial and list items you can purchase with some cost (the most expensive is \$1,100.00). Educators should select sites that will meet the students' needs.

### **Math Standards**

# Content Standard 1 - Problem Solving

In grades K - 4, the study of mathematics should emphasize problem solving so that students can...

- 1.use problem-solving approaches to investigate and understand mathematical content;
- 2.formulate problems from everyday and mathematical situations;
- 3.develop and apply strategies to solve a wide variety of problems;
- 4.verify and interpret results with respect to the original problem; and
- 5. acquire confidence in using mathematics meaningfully.

### Content Standard 3 - Reasoning

In grades K - 4, the study of mathematics should emphasize reasoning so that students can...

- 1.draw logical conclusions about mathematics;
- 2.use models, known facts, properties, and relationships to explain; their thinking;
- 3. justify their answers and solution processes;
- 4.use patterns and relationships to analyze mathematical situations;
- 5.believe that mathematics makes sense.

#### Content Standard 4 - Connections

In grades K - 4, the study of mathematics should include opportunities to make connections so that students can...

- 1.link conceptual and procedural knowledge;
- 2.relate various representations of concepts or procedures to one another:
- 3.recognize relationships among different topics in mathematics;
- 4.use mathematics in other curriculum areas; and
- 5.use mathematics in their daily lives.

#### Content Standard 10 - Measurement

In grades K - 4, the study of mathematics should include measurement so that students can...

- 1.understand the attributes of length, capacity, weight, area, volume, time, temperature, and angle;
- 2.develop the process of measuring and concepts related to units of measurement:
- 3.make and use estimates of measurement; and
- 4.make and use measurements in problem and everyday situations

# **National Science Education Standards**

## Content Standard B - Physical Science

As a result of the activities in grades K-4, all students should develop an understanding of...

- 1. Properties of objects and materials
- 2. Position and Motion of Objects

# Content Standard E - Science and Technology

As a result of the activities in grades K-4, all students should develop an understanding of...

- 1. Abilities of Technological design
- 2. Understanding about Science and Technology

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